

IN THE CLAIMS

1. – 6. (canceled).

7.(presently amended)An electronic appliance, comprising:

one or more dipole antenna(e);

one or more wireless network interface(s), coupled with the one or more dipole antenna(e), to communicate with other devices; and

an extender engine coupled with the wireless network interface(s), the extender engine to function as a client to a first wireless network access point and the extender engine to function as a second wireless network access point to one or more other client(s), including performing one or more functions chosen from the group consisting of: beacon, client connection table maintenance, client authentication, and dynamic host configuration protocol (DHCP) service.

8. (original) The electronic appliance of claim 7, wherein the extender engine to function as a second access point to one or more other client(s) comprises:

the extender engine to send and receive communications between client(s) on an extended coverage network and resource(s) on a primary network.

9. (original) The electronic appliance of claim 8, wherein the extender engine to send and receive communications between client(s) on an extended coverage network and resource(s) on a primary network comprises:

the extender engine to transmit the communication(s) as received.

10. (original) The electronic appliance of claim 8, wherein the extender engine to send and receive communications between client(s) on an extended coverage network and resource(s) on a primary network comprises:

the extender engine to translate the communication(s) between the primary network and the extended coverage network.

11. (original) The electronic appliance of claim 10, wherein the extender engine to translate the communication(s) between the primary network and the extended coverage network comprises:

the extender engine to utilize a network address translation (NAT) table(s) to determine for which client(s) the communication(s) was intended.

12. (original) The electronic appliance of claim 10, wherein the extender engine to translate the communication(s) between the primary network and the extended coverage network comprises:

the extender engine to translate the communication(s) between a first network protocol and a second network protocol.

13. (presently amended) A storage medium comprising content which, when executed by an accessing machine, causes the accessing machine to function as a client to a first wireless network access point and to function as a second wireless network access point to one or more other client(s), including performing one or more functions chosen from the group consisting of: beacon, client connection table maintenance, client authentication, and dynamic host configuration protocol (DHCP) service.

14. (original) The storage medium of claim 13, wherein the content to function as a second access point to one or more other client(s) comprises content which, when executed by the accessing machine, causes the accessing machine to send and receive communications between client(s) on an extended coverage network and resource(s) on a primary network.

15. (original) The storage medium of claim 14, wherein the content to send and receive communications between client(s) on an extended coverage network and resource(s) on a primary network comprises content which, when executed by the accessing machine, causes the accessing machine to transmit the communication(s) as received.

16. (original) The storage medium of claim 14, wherein the content to send and receive communications between client(s) on an extended coverage network and resource(s) on a primary network comprises content which, when executed by the accessing machine, causes the accessing machine to translate the communication(s) between the primary network and the extended coverage network.

17. (original) The storage medium of claim 16, wherein the content to translate the communication(s) between the primary network and the extended coverage network comprises content which, when executed by the accessing machine, causes the accessing machine to utilize a network address translation (NAT) table(s) to determine for which client(s) the communication(s) was intended.

18. (original) The storage medium of claim 16, wherein the content to translate the communication(s) between the primary network and the extended coverage network comprises content which, when executed by the accessing machine, causes the accessing machine to translate the communication(s) between a first network protocol and a second network protocol.

19. (presently amended) An apparatus, comprising:

one or more dipole antenna(e);

one or more wireless network interface(s), coupled with the dipole antenna(e), to communicate with other devices; and

control logic coupled with the wireless network interface(s), the control logic to function as a client to a first wireless network access point and the control logic to function as a second wireless network access point to one or more other client(s), including performing one or more functions chosen from the group consisting of: beacon, client connection table maintenance, client authentication, and dynamic host configuration protocol (DHCP) service.

20. (original) The apparatus of claim 19, wherein the control logic to function as a second access point complies with the IEEE 802.11 specification.

21. (original) The apparatus of claim 20, further comprising the control logic to create two or more virtual networks.

22. (original) The apparatus of claim 21, further comprising the control logic to time-share one wireless network interface between two or more virtual networks.

23.(original) The apparatus of claim 22, wherein the control logic to time-share utilizes one or more of 802.11 RTS/CTS and CTS-To-Self techniques.